

In claim 35, delete the phrase “or otherwise forming”

Remarks:

The claims pending in this application are claims 1-37. All claims stand rejected.

It is noted that the previously issued Restriction Requirement has been withdrawn.

1. 35 U.S.C.112, Second Paragraph:

Claims 1 and 12 stand rejected as being indefinite. In claim 1, it is stated that the phrase “substantially bioabsorbable osteogenic components” is vague, indefinite and confusing. It is stated that it is not known what is meant by the words “substantially bioabsorbable” and “osteogenic components”.

In response, the Examiner’s attention is respectfully directed to page 8, lines 18-25, wherein a definition of what is meant by the words “substantially bioabsorbable” is provided – i.e. “the property of a material able to cooperate in and become incorporated with new bone formation”. For a definition of the term “osteogenic components,” the Examiner’s attention is respectfully directed to page 7, line 28 to page 8, line 8, where a variety of osteogenic materials are listed for inclusion in the carrier material. Based on the specific guidance provided in the specification, it is respectfully urged that those skilled in the art would have a clear appreciation of what is intended in claim 1 by the phrases “substantially bioabsorbable” and “osteogenic components”. Accordingly, it is respectfully requested that this ground for objection or rejection be reconsidered and withdrawn.

In claim 12, the term “or other proteins” has been deleted.

In claim 35, the term “or otherwise forming” has been deleted.

In view of the foregoing comments and amendments, reconsideration and withdrawal of this ground for rejection is respectfully requested.

2. 35 U.S.C. 103:

Claims 1-37 are rejected under 35 U.S.C.103(a) as being unpatentable over Kuberasampath et al. It is stated that Kuberasampath teaches an implantable bone composition (column 1, lines 14-16) which further comprises gelatin (column 11, line 50), a powder (column 11, line 51), pulverized bone milled to a particular size of 70-850 mm (column 19, line 15-16), bovine bone matrix (column 8, lines 8-11), is biodegradable (column 4, line 55), and said composition is lyophilized. It is stated that it would have been obvious at the time of the invention to use the teachings of Kuberasampath which teaches a bone collagen matrix for implants to provide a bone paste useful in the orthopedic arts.

In response, the Examiner is respectfully requested to consider the following remarks, observations, and arguments:

1. Kuberasampath clearly states that the disclosed and claimed matrix, while said to be biocompatible and biodegradable, is formed from insoluble Type-I bone **particulate** collagen of enhanced **surface area**. (See abstract; figures; column 5, lines 34-41; column 5, lines 46-50; column 6, lines 14-17). Accordingly, the carrier of the cited reference is not gelatin, as required by the instant claims. As can be seen from the opening paragraph of the cited patent’s detailed description, the carrier of that patent

is prepared by cleaning, demarrowing, delipidating, demineralizing, particulating and extracting bone. There is no disclosure or suggestion of transforming the bone or extracting the bone to form a soluble gelatin carrier, which is different chemically and physically than insoluble collagen.

2. The mention of gelatin at column 11, line 50, simply states that the collagen particles may be “encapsulated in, e.g. a gelatin or polylactic acid coating”. However, it is respectfully urged that mention of gelatin encapsulated particles neither discloses nor suggests a composition comprising gelatin as a carrier for bioabsorbable osteogenic components (see instant claim 1). Such a mention certainly does not provide an enabling disclosure of, for example, the composition according to instant claim 1, the thermally cross-linkable composition having the properties defined according to claim 3, a composition having the specific gelation characteristics defined according to claim 4, a composition having the specific compositional requirements of claim 5. The same considerations apply, *a fortiori*, in reviewing the patentability of claims which depend from the above discussed claims, since the dependent claims define ever more precise and specific aspects of the claimed invention which are neither disclosed nor suggested by the cited reference.
3. At column 11, line 57 to column 12, line 3, Kuberasampath confirms that their matrix if implanted alone, is not osteogenic (see, in particular, column 11, lines 61-62). However, the composition according to instant claim 1 comprises gelatin as a carrier for osteogenic components. Accordingly, a composition comprising gelatin and the matrix according to Kuberasampath is clearly distinguishable from and neither discloses nor suggests the composition according to the instant disclosure. Per the Kuberasampath disclosure, osteogenic factors have to be added to the non-osteogenic matrix, which forms the basis of the cited patent (see column 12, lines 5-50).

In light of all of the foregoing observations and remarks, it is respectfully urged that the Kuberasampath reference neither discloses nor suggests the in instant gelatin-osteogenic composition. Reconsideration and withdrawal of this ground for rejection is respectfully requested.

Having addressed and overcome all grounds for rejection of claims in this application, it is respectfully urged that all grounds for rejection should be reconsidered and withdrawn.

Respectfully Submitted,



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